

PATENTS
10/799,077
DOCKET 8151

REMARKS

Status of the Claims

In the Office Action, claims 1-22 are noted as pending in the application. All claims stand rejected. By this amendment, claims 3 and 16 are canceled. Thus, claims 1-2, 4-15 and 17-22 are pending.

A. Summary of Cited References

Before addressing the Examiner's rejections, a brief summary of the cited references is provided.

U.S. Patent number 6,952,571 to Garrabrant, et. al. ("Garrabant")

Garrabrant relates to updating the status of a digital signal processor based on the signal strength of a single communication channel. Title. A radio signal strength indicator ("RSSI") is used to provide visual indication of a particular broadcast network's channel signal strength. Col. 8, lines 42-45. A digital signal processor ("DSP") monitors the channel signal strength fluctuations and a main processor is awakened from a low power mode if the range of fluctuation exceeds a predetermined value. Col. 9, lines 61-65. The main processor provides a particular channel to measure. Col. 9, lines 12-14. The "main processor may be instructed to search for an acceptable broadcast channel with which it may continue the wireless connection previously obtained." Col. 10, lines 4-7.

U.S. Patent number 6,901,276 to Skinner, et. al. ("Skinner")

Skinner relates to using a DSP to directly control a multi channel scan of communications channels available to re-establish connections to a wireless device. Title. When the DSP identifies acceptable channels, it wakes up the main processor and identifies the channels having sufficient strength. Abstract.

U.S. Patent Publication number 2004/0033812 to Matsunaga, et. al. ("Matsunaga")

Matsunaga relates to the use of a wireless LAN card in a computer. If an AC power source is not currently providing power to the host computer, then the wireless LAN card is set to a power saved mode. Page 4, par [52]. When in the power save mode, the base band processor and the media access control continue to receive power from the current power source (typically a battery). Page 4, par. [53].

U.S. Patent number 6,085,114 to Gibbons, et. al. ("Gibbons")

Gibbons relates to operation of a remote wireless device when it loses AC power. When AC power is lost at the remote unit, it is synchronized to a TDD timing structure in a sleep mode. Col. 2, lines 41-43. The remote receiver scans for incoming CONNECT messages during a standby mode. Col. 2, lines 43-46. If no CONNECT message is present, the receiver re-enters sleep mode for a predetermined period, which equals a predetermined number of subframes corresponding to the identification number of the remote unit. Col. 2, lines 46-52. The base station may provide a message to the remote unit using a spread spectrum signal, thus indicating that communication signal frequencies may always be present to the remote unit. Col. 3, lines 1-44.

PATENTS
10/799,077
DOCKET 8151

B. The Claims are not Obvious over the Cited References

Applicant respectfully submits that the subject matter of the claims patentably distinguish over the cited references. Under MPEP § 2142, for an examiner to establish a *prima facie* case of obviousness, "three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure." If any of these three criteria are not met, the Examiner has not met the burden of establishing a *prima facie* case of obviousness, and the rejection should be withdrawn.

Furthermore, each dependent claim includes all of the limitations of the independent claim from which it depends. If an independent claim is non-obvious under 35 U.S.C. § 103, then any claim depending therefrom is non-obvious. MPEP §2143.03, citing *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Applicant respectfully submits that the burden of establishing a *prima facie* case of obviousness has not been met.

C. Rejection of claims

On page 2 of the Office Action, claims 1 and 3-6 are rejected under 35 U.S.C. § 103 as being obvious over Garrabrant in view of Skinner. Claim 1 claims in pertinent part:

... scanning a plurality of possible RF channels using a processor having RF circuitry to detect whether an RF channel is present that can be made active;

placing the processor into a sleep mode if an active RF channel or an RF channel that can be made active is not detected;

starting a timer set for a predetermined period if an active channel or one of the plurality of possible RF channels is not detected; and

awakening the processor from sleep mode when the predetermined period has elapsed . . .

Garrabrant does not disclose a processor having RF circuitry. Neither does Skinner.

Claim 1 is amended to recite that the processor used to scan for available RF channels includes RF circuitry, as disclosed in the specification at page 10, lines 1-2. The references, either alone or in combination, do not disclose all of the claim limitations, because each specifically teaches that RF transceiver circuitry is separate from the processor (Garrabrant Col. 1, lines 47-56; and Skinner col. 1, lines 33-40). Furthermore, there is no suggestion to combine the references because shutting down the processor circuitry in the references still leaves the RF circuitry active; this would not result in a likelihood of success by combining the reference teachings. Withdrawal of the rejection is respectfully requested.

PATENTS
10/799,077
DOCKET 8151

Claim 3 is canceled by this amendment.

With respect to claim 4, as filed it contains the limitations of claim 1. These limitations have been written into the claim by this amendment to place it into independent form. Thus, the scope of claim 4 is not changed by this amendment.

Claim 4 is similar to claim 1 in that that the processor circuitry and RF circuitry are placed into sleep mode. Thus, as under the analysis of claim 1 above, the references do not render claim 4 obvious because neither of the references teaches that the RF circuitry sleeps while in sleep mode. In FIG. 4 in Garrabrant, the DSP 136 appears to be part of, or shares connection to bus 130 with, communication circuit 135. Garrabrant teaches that DSP 136 sleeps during sleep mode, col. 9, lines 20-23, but does not teach that communication circuit 135 sleeps. Thus, communication circuit 135 is always on and consuming power. This contrasts with limitations recited in claims 1 and 4, in which the RF circuitry sleeps, thus not consuming power during sleep mode. Accordingly, independent claims 1 and 4 patentably distinguish over the references. Withdrawal of the rejection is respectfully requested.

Claim 5 is similar to claim 4, but in claim 5, an RF detecting means is used while the main processor is in sleep mode. The RF detecting means does not typically possess a full complement of RF tuner components, but using minimal components can determine whether energy that may correspond to an RF communication channel is present. This is described in the specification at page 16, lines 15-24. Thus, claim 5 distinguishes over the references because the RF circuitry, recited in the claim, which consumes the most power, sleeps. In contrast, the references do not teach that the comparable circuitry discussed therein sleep during sleep mode. Thus, all the limitations recited in claim 5 are not found in the references.

Regarding Skinner, vis-à-vis the rejection of claim 5, the RF circuitry in Skinner does not operate as claimed in the recited limitations. The full RF circuitry stays on in Skinner to work in conjunction with the DSP to scan available channels. This contrasts with the claimed limitation of merely detecting the presence of RF energy while the processor sleeps. As recited in the claim, the processor does not wake to scan the communication channels until after the presence of RF energy has been detected. Thus, the claim patentably distinguishes over the references. Withdrawal of the rejection is respectfully requested.

Claim 8 claims a controller for controlling operation of the UPS. Garrabrant discloses using a DSP, which is more sophisticated than a micro controller. Thus, a micro controller is not disclosed in Garrabrant, either being coupled to the UPS or not. Regarding the secondary reference, Gibbons does not disclose that the controller receives an instruction from the component to be put to sleep, which is the processor in claim 8. In Gibbons, the controller is the sole component that determines whether another component is to be put to sleep or not. Thus, all the elements of claim 8 are not found in the references, either alone or in combination. Furthermore, there cannot be a reasonable expectation of success in combining the teachings of the cited references because to demonstrate such an expectation would require that the controller in Gibbons shut itself down, thus preventing the controller from "periodically interrupt[ing] [sleep mode operation] by the controller. Gibbons, col. 2, lines 60-61. Therefore, claim 8 patentably distinguishes over the references. Withdrawal of the rejection is respectfully requested.

PATENTS
10/799,077
DOCKET 8151

In addition, claim 9 distinguishes over the references because, as discussed above, the RF detecting means is not the same component as the RF circuitry contained in the processor that goes into sleep mode. The RF detecting means does not sleep while the more robust RF circuitry of the processor does. Therefore, all the claim limitations are not found in the references. Similar analysis applies with respect to claim 10.

Regarding claim 17, similar analysis applies as to claim 8 as provided above.

Moreover, as demonstrated above, the independent claims patentably distinguish over the references. All of the other rejected claims depend from these independent claims and therefore contain all of the limitations contained in their respective base claims. Accordingly, under MPEP §§2142 §2143.03, these dependent claims also patentably distinguish over the references and withdrawal of the rejection is respectfully requested.

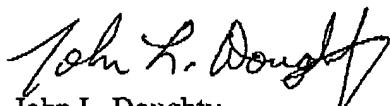
For all the reasons advanced above, Applicant respectfully submits that the application is in condition for allowance and that action is earnestly solicited.

If the Examiner believes that there are any issues that can be resolved by a telephone conference, or that there are any informalities that can be corrected by an Examiner's amendment please contact the undersigned at the mailing address, telephone, facsimile number, or e-mail address indicated below.

Arris International, Inc.
3871 Lakefield Drive
Suwanee, Georgia 30024
(678) 473-8697
(678) 473-8095 - fax
john.doughty@arris.com

Respectfully submitted,

Arris International, Inc.



John L. Doughty
Reg. No. 47,533